IN THE CLAIMS

1.-4.   (Canceled)

5.   (New) A natural speech dialogue system comprising:

a natural language understanding engine;

a speech recognition engine operable to recognize words in a dialogue and to transmit the recognized words to the natural language understanding engine for further processing;

a knowledge support module, the knowledge support module comprising a knowledge representation database and a knowledge base interface;

a context information module, the context information module comprising a context information data structure, a context information interface, and at least one dialogue act rule set, wherein the context information data structure is an attribute-value data structure operable to store information of a conversation; and

a flexible dialogue management module operable to control a flow of information between the knowledge base interface, the context information interface, the speech recognition engine, and the natural language understanding engine, wherein the flexible dialogue management module is operable to apply a set of general dialogue act rules to a conversation in connection with context information from the context information module, and to generate a response to the conversation using the knowledge support module.

6.   (New) The natural speech dialogue system of claim 5, further comprising a text to speech engine operable to create a speech signal in response to a text signal from the flexible dialogue management module.

7.   (New) The natural speech dialogue system of claim 5, further comprising a telephone interface engine that is coupled to a telephone and the flexible dialogue management module.

8.   (New) The natural speech dialogue system of claim 5, wherein the natural speech dialogue system is a mixed-initiative dialogue system.

9.   (New) A method of processing dialogue, comprising:

receiving a dialogue input signal;

transmitting the dialogue input signal to a speech recognition engine operable to produce recognized words;

transmitting the recognized words to a natural language understanding engine to obtain a conceptual information related to the recognized words;

obtaining context information for the recognized words from a context information module;

creating a user response using a knowledge support module; and

converting the user response to an audio dialogue output signal using a text to speech engine.

10.   (New) The method of claim 9, further comprising selectively initiating a sub-dialogue based on dialogue act principles in response to a request for clarification.

11.   (New) The method of claim 9, wherein said obtaining context information step includes searching for a hidden implicature in the audio dialogue input signal.

12.   (New) The method of claim 9, wherein said creating a user response using a knowledge support module step further comprises:

receiving a knowledge base search request; and

deciding whether the knowledge base search request is a request for objects and associated object properties or a search for processes and associated process relations.

13.   (New) The method of claim 12, further comprising:

a) searching for an object property in a first concept;

b) searching for the object property in a second parent concept in response too not finding the object property; and

c) selectively repeating step (b) until the object property is found.

14.   (New) The method of claim 12, further comprising:

a) searching for a process relation corresponding to a first process;

b) performing a search for second process similar to the first process in response to not finding the process relation; and

c) selectively repeating step (b) until the process relation is found.

15.   (New) The method of claim 9, further comprising requesting additional instruction from a user in response to receiving insufficient context information from the context information module.

16.   (New) The method of claim 9, further comprising transmitting a request to at least one business server in response to a requested action.